

Remarks

Applicants affirm the oral election of claims 1-21, and have canceled the remaining claims 22-40 along with claims 11, 19, and 20.

The Office Action rejects claims 1, 3, 4, 8-14, and 18-21 under 35 U.S.C. § 102(b) as anticipated by Kumar et al. This rejection is respectfully traversed.

It is well-settled law that for a prior art reference to anticipate a patent claim, each and every limitation in the claim must be found in the reference. Applicants' claimed invention requires mixing a first air at a first temperature with a second air at a second temperature in order to control the temperature going into a reformer. Such a temperature control scheme is highly advantageous for reformers such as partial oxidation reformers because it allows for precise and quick-response temperature control at the inlet of the reformer independent of the total air mass flow rate being fed to the reformer, which often cannot be adjusted as it must be maintained in a certain stoichiometric range. The Kumar et al reference discloses feeding two air/fuel/water streams to a reformer (one at the reformer inlet and one at the reforming zone); however, it is *completely silent* with respect to the temperatures of these air/fuel/water streams. Thus, there is no disclosure in the reference of Applicants' claimed invention.

The Office Action refers to col. 4, lines 4-11 and the figures of the Kumar et al reference. Attorney for Applicants has carefully reviewed the cited sections along with the rest of the reference, and can find no mention of adding two air streams at two different temperatures to the reformer. If the Examiner intends to maintain the rejection based on the Kumar et al reference, Applicants respectfully request that references be

provided as to the location in the document of the specific disclosures of the elements of Applicants' claimed invention.

The Office Action also rejects claim 2 under 35 U.S.C. § 103(a) as unpatentable over Kumar et al in view of JP 1-217865, and rejects claims 5-7 and 15-17 under 35 U.S.C. § 103(a) as unpatentable over Kumar et al in view of Towler et al. However, JP '865 and the Towler et al reference do nothing to remedy the above-discussed problems with the Kumar et al primary reference. Accordingly, Applicants respectfully submit that the 35 U.S.C. § 103 rejections should be withdrawn.

For the above reasons, Applicants respectfully submit that the application is presently in condition for allowance, and request early action toward that end.

Please charge any necessary fees, including any extension of time, or any other fee deficiencies to Delphi Technologies, Inc., Deposit Account No. 50-0831.

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